

### **AMENDMENTS TO THE DRAWINGS**

The attached "Replacement Sheets" of drawings include changes to Figures 1, 3, 9, 10, 12, 16, 17, 30-32, 37-39, 40a, 40b, 42 and 43. The attached "Replacement Sheets," which include Figures 1-3, 9-18, 30-33, 36-43, replace the original sheets including Figures 1-3, 9-18, 30-33, 36-43.

Attachment- Replacement Sheets:

Pages 1/19, 4/19, 5/19, 6/19, 11/19, 12/19, 14/19, 15/19, 16/19 and 17/19

### **REMARKS**

Claims 1-25 are now pending in the application, of which Claims 19-25 have been withdrawn from consideration. Claims 1-18 stand rejected and Claims 1 and 13 have been amended. Support for the amendments can be found throughout the application, drawings and claims as originally filed and, as such, no new matter has been presented. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

### **ELECTION/RESTRICTIONS**

Applicants affirm the January 3, 2007 telephonic provisional election made without traverse to prosecute the invention of Group I, Claims 1-18, and acknowledge the Examiner's withdrawal of Claims 19-25 from further consideration herein.

### **DRAWINGS AND SPECIFICATION**

The drawings stand objected to as failing to comply with 37 CFR 1.84(p)(5). Per the Examiner's suggestion, Applicants have amended the drawings and the specification to overcome these objections, and attach revised drawings for the Examiner's approval. Therefore, reconsideration and withdrawal of these objections are respectfully requested.

### **REJECTION UNDER 35 U.S.C. § 103**

Claims 1-4, 6-9, 11, and 13-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cooper (U.S. Pat. No. 4,672,955) in view of Papay et al. (U.S. Pat.

No. 6,423,019), and further in view of Nowak et al. (U.S. Pat. No. 5,433,418). This rejection is respectfully traversed.

During the rejection of the claims, the Office characterizes Cooper as teaching a 3-D replica of a leg and applying a pattern thereto. Applicants respectfully traverse this characterization. Applicants acknowledge that Cooper discloses pressing uncured composite pre-preg onto a leg model. Cooper, however, does not teach applying a pattern to the leg model. The Examiner's attention is directed to Claim 1 which has been amended to clarify that the pattern is different from the composite, and is used to form the mold cavity. In this regard, Claim 1 has been amended to include the step of "removing the pattern" to clarify that the pattern is not the uncured composite material.

Further, Applicants submit that the cited references do not teach other limitations of the independent Claims 1 and 13. Specifically, Claims 1 and 13 contain the limitations "covering the body model and flexible pattern with a deformable thermoplastic polymer layer" and "applying at least one of pressure or vacuum to the model and the splash mold in the presence of heat so as to form the reinforced polymer material."

With respect to the Nowak reference, the Office states that Nowak teaches forming a splash mold for the purpose of molding a composite material (cited lines 65-68 of column 7, and 1-20 of column 8). While Applicants acknowledge Nowak teaches the use of a reinforced flexible mold for mold disassembly, it does not teach the use of a thermoplastic mold. Further, Applicants submit that it would not be obvious for one skilled in the art to apply pressure and heat to a thermoplastic splash mold to cure a thermoset composite.

Claims 10 and 17-18 stand rejected as being unpatentable over Cooper in view of Papay and Nowak as applied to Claims 1-4, 6-9, 11, and 13-16 above, and further in view of Townsend et al. (U.S. Pat. No. 5,658,244). Claim 5 stands rejected as being unpatentable over Cooper in view of Papay and Nowak as applied to Claims 1-4, 6-9, 11, and 13-16 above, and further in view of Moermann et al. (U.S. Pat. No. 4,575,805). Claim 12 stands rejected as being unpatentable over Cooper in view of Papay and Nowak as applied to Claims 1-4, 6-9, 11, and 13-16 above, and further in view of Seemann (U.S. Pat. No. 5,601,852). These rejections are respectfully traversed.

Applicants respectfully submit for the above-mentioned reasons the references do not teach or suggest the limitations of Claims 10, 12 and 17-18. In this regard, Applicants submit that the Townsend, Moermann and Seemann references are silent as to the use of a thermoplastic material as a mold for curable composite materials. As such, the rejections are improper.

## **CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested.

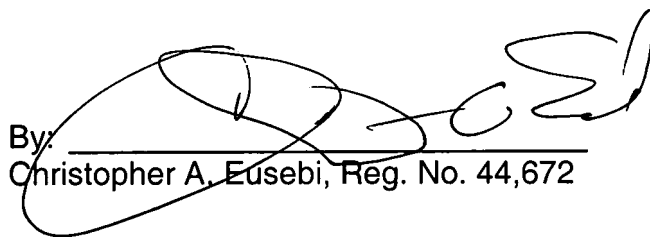
If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: May 7 - 2007

HARNES, DICKEY & PIERCE, P.L.C.  
P.O. Box 828  
Bloomfield Hills, Michigan 48303  
(248) 641-1600

CAE/lf-s/smb

By:   
Christopher A. Eusebi, Reg. No. 44,672